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| 10/551,189 | 09/29/2005 | Falko Skrabal | 66376-365-7 | 1869 |
| 25769 7590 11/29/2007 DYKEMA GOSSETT PLLC FRANKLIN SQUARE, THIRD FLOOR WEST 1300 I STREET, NW WASHINGTON, DC 20005 | | | | |
| EXAMINER NATNITHITHADHA, NAVIN | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/551,189

Applicant(s)

SKRABAL ET AL.

Examiner

Navin Natnithadha

Art Unit

3735

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27, 28, 30-33, 35 and 37-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27, 28, 30-33, 35 and 37-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 08/30/2007
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Claims 27, 28, 30-32, 35, and 40 have been amended. Claims 1-26, 29, 34, and 36 have been cancelled. Claims 27, 28, 30-33, 35, and 37-40 are pending.
2. The objection to Drawings are WITHDRAWN in view of the Replacement Sheets, pp. 1-5, filed on 30 August 2007.
3. The objection to the Abstract is WITHDRAWN in view of the Amendment, filed on 30 August 2007.
4. The 35 U.S.C. 112, second paragraph, rejections to claims 27-40 are WITHDRAWN in view of the Amendment, filed on 30 August 2007.

Oath/Declaration

5. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

Applicant's Declaration incorrectly states, "I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a)" (emphasis added to show the error).

Response to Arguments

6. Applicant's arguments with respect to claims 27-40 have been considered but are moot in view of the new ground(s) of rejection.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The abstract of the disclosure is objected to because it exceeds 150 words in length. Correction is required. See MPEP § 608.01(b).
8. The disclosure is objected to because of the following informalities: the Specification is missing section headings. Appropriate correction is required.

Claim Objections

9. Claim 27 is objected to because of the following informalities: in claim 27, line 16, "first pressure measurement chamber" should be amended to "first pressure measuring

chamber" in order to provide proper antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

10. Claims 35 and 37-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 35, it is not clear as to whether the "controlling and adjusting device" is part of the claimed invention because this element is not positively recited in the claim. Claims 37-40 are rejected due to their dependency to claim 35.

Claim 39 recites the limitations "at least one sensor" (the first or second plethysmographic sensor or the pressure sensor or a different sensor?) "measuring a volume change of said body part" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 38, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Examiner's Comment

11. In regards to claim 27, Examiner suggests using colons and semicolons to separate the process step limitations of the claim. In regards to claim 35, Examiner suggests using indentations, paragraphs, colons, and semicolons to separate the structural element limitations of the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 27, 28, 35, 37, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Simons, U.S. Patent No. 5,152,296 A ("Simons").

Claims 35, 37, 39, and 40: Simons teaches a device for the continuous, non-invasive measurement of blood pressure (see Abstract and fig. 7), comprising: at least one first and one second pressure cuff ("cuff 1" and "cuff 2") of identical or comparable size for attachment on at least one first and one second finger ("finger 106 and 108") containing an artery of identical or comparable size, each pressure cuff (1 and 2) having an inflatable pressure measuring chamber ("cuff 110" and "cuff 112"), the first pressure cuff (1) being provided with a first plethysmographic sensor device ("hemoglobin oxygenation transducer portion 118 and 124" and "ECG transducer portion 114 and 120") connected to a controlling and adjusting device ("processing and control circuitry

176") which controls the pressure in the first pressure measuring chamber (110) using the measuring signal of the plethysmographic sensor device (118), and where the pressure measuring chamber (110 and 112) is connected to a pressure sensor ("pressure transducer portion 114 and 120") to obtain a pressure measuring signal, wherein the pressure measuring chamber (112) of the second pressure cuff (2) is configured as a reference pressure chamber (see col. 2, ll. 2-32), which is controlled simultaneously with and independently of the pressure measuring chamber (110) of the first pressure cuff (1), wherein the second pressure cuff (2) is provided with a second plethysmographic sensor device (124), and wherein the pressure measuring chamber (110) of the first pressure cuff (1) and the reference pressure chamber (112) of the second pressure cuff (2) each have separate inlet valves and outlet valves (pressure servos 152 and 154"), with the pressure in the reference pressure chamber (112) being controlled via the controlling and adjusting device (176) in accordance with a preselectable pressure function, and a pressure source (153).

Although claim 35 states that the first and second pressure cuffs "for attachment on at least one first and one second neighboring finger", this language is a recitation of the intended use of the claimed invention, which must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). Although Simons' cuffs 1 and 2 are attached to each of the fingers on patient's right and

left hands as embodied in Figure 7, cuffs 1 and 2 are certainly capable of attachment to neighboring fingers and within the scope of Simons' disclosure (see col. 5, ll. 25-30).

Claims 27 and 28: Simons teaches a method for the continuous, non-invasive measurement of blood pressure based on the principle of the unloaded arterial wall (see Abstract and fig. 7), comprising:

positioning a first and a second pressure cuff (1 and 2) of identical or comparable size with a first and a second inflatable pressure measuring chamber (110 and 112) on at least one first and one second finger (106 and 108), each containing an artery of identical or comparable size (see fig. 7);

controlling pressure in the first pressure measuring chamber (110) in dependence on a measurement signal of a plethysmographic sensor device (118) in such a way that an amplitude of the plethysmographic measurement signal is minimized (see col. 4, l. 42, to col. 5, l. 19);

obtaining a pressure measuring signal from the first pressure measurement chamber (110) (see col. 4, l. 42, to col. 5, l. 19);

operating the second pressure measuring chamber (112) as a reference pressure chamber independently of the first pressure measuring chamber (110); and

controlling the pressure in the reference pressure chamber (112) in dependence on a measurement signal of a second plethysmographic sensor device (124) and in accordance with a preselectable pressure function, a reference signal being obtained simultaneously with the pressure measuring signal, and the reference signal used in the interpretation of the pressure measuring signal (see col. 4, l. 42, to col. 5, l. 19).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Simons in view of Goor et al, U.S. Patent No. 6,322,515 B1 ("Goor").

Claim 38: Simons does not teach a blood pressure measuring device comprising a heating unit that is "integrated in or appended to the two pressure cuffs, which heating unit is provided with at least one heating element". However, this feature is well-known in the art. For example, Goor teaches a blood pressure finger cuff probe 2a comprising an electrical heater winding 8. Thus, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Simons blood pressure finger

cuffs (1 and 2) to include an electrical heater winding as taught by Goor in order to “[produce] maximal dilation of the arterial blood vessels in the subject’s finger and thereby maintain a steady state of minimal resistance to blood flow during the subsequent measurements” (see Goor, col. 32, ll. 31-42).

Allowable Subject Matter

13. Claims 30-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Navin Natnithithadha whose telephone number is (571) 272-4732. The examiner can normally be reached on Monday-Friday, 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, II, can be reached on (571) 272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Navin Natnithithadha/
Examiner, Art Unit 3735
11/14/2007

/Charles A. Marmor, II/
Supervisory Patent Examiner
Art Unit 3735